

INFLUENCE OF PROTEIN LEVEL ON FOOTPAD DERMATITIS

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Abstract

The general objective of nutrition is to maximise the economic production performance of broilers but good nutrition is also important from a health point of view. Nutrition can indirectly impact bird welfare by acting on the environment. An excess of crude protein in the diet will increase the nitrogen emission along with wet droppings which will result in a high prevalence of contact dermatitis (Gordon et al., 2003). Footpad dermatitis (FPD) is a condition characterised by lesions on the ventral foot-pads of poultry. The aim of this study was to determine the influence of three protein levels: high protein (HP), medium (MP) and low protein (LP). A total of 1272 as-hatched broiler chickens (Ross 308) were randomly allocated in 12 pens of 5.0 m x 1.4 m. From 7 days both feet were examined and scored for the incidence and development of FPD on a scale from 0 (no lesion) to 2 (very severe lesions). FPD occurred at as early as 7 days. FPD scores at 42 days were 51.16 (LP), 66.10 (HP), 76.56 (MP) exceeding the value of 50 points considered in the Directive proposal (European Commission, 2005). The protein level influences the FPD score of broiler chickens at slaughter.

Key words: Broilers, footpad dermatitis, protein level